

REMARKS

This Amendment is responsive to the Office Action identified above, and is further responsive in any other manner indicated below.

PENDING CLAIMS

Claims 1-36 and 50-72 were pending, under consideration and subjected to examination in the Office Action. At entry of this paper, Claims 1-36 and 50-72 remain pending for further consideration and examination in the application.

AMENDMENT TO THE SPECIFICATION

Applicant has hereinabove amended the identification of related applications submitted 4 January 2002 to conform to reissue patent practice.

DEFECTIVE OFFICE ACTION

Items 2a and 2b of the Office Action Summary sheet of the Office Action contradict each other, with one characterizing the Office Action as "Final" and the other characterizing as "Non-Final." It is presumed by Applicant that the Office Action mailed 31 March 2003 is **NOT** final since such Action does not contain the required complete statement of a ground of final rejection, the required form paragraph containing the statement of finality of the Action, or one of the required MPEP form paragraphs 7.39 *et seq.*

Item 4a of the Office Action Summary lists Claims 15-36 as having been withdrawn from consideration. Such an indication is in error because no

restriction/election has ever been required or responded to within the present application.

The obviousness-type double patenting rejections within the Section 5 on page 4 of the Office Action are very confusing in at least two ways. The discussion intermingles two different patents (*i.e.*, US 5,378,656 (which is an ancestor to the present application) and US 6,342,731 B1 (which was filed and is owed by wholly differing inventors and Assignee). Second, at least four (4) differing groups of claims are recited, *i.e.*, Claims 1-23, Claims 1-22, Claims 15-36 and Claims 1-14.

Applicant has herein made a *bona fide* attempt to respond to the erroneous Office Action. It is respectfully submitted that, in view of the significant/substantial errors within the present Office Action, such Action is defective, and therefore, it would not be proper to make any next Office Action final.

CLAIMS FOR PRIORITY

Acknowledgment and confirmation of the completion of requirements for Applicant's claims for foreign and domestic priorities are respectfully requested.

SUPPLEMENTAL REISSUE OATH/DECLARATION

With regard to Item 3 on page 2 of the Office Action, submitted herewith is a Supplemental Reissue Declaration. Acknowledgement of receipt, approval and entry of such Supplemental Reissue Declaration are respectfully requested.

**DOUBLE PATENTING REJECTION - TRAVERSED
IMPROPER BETWEEN ORIGINAL PATENT AND REISSUE APPLICATION**

Claims 1-14 have been rejected under 35 USC §101 based upon Claims 1-14 of prior parent US 5,637,913. The double patenting rejection with the original parent patent is respectfully traversed as being completely improper. More particularly, there is absolutely no potential for double patenting under U.S. patent laws because the original patent is replaced upon issuance of any reissued patent. Of specific relevance, the provisions of 35 USC §252 state:

The surrender of the original patent shall take effect upon the issue of the reissued patent,...

Accordingly, Applicant respectfully submits that the double patenting rejection with the original patent is improper, and respectfully requests that such rejection be withdrawn.

6,342,731 B1 DOUBLE PATENTING REJECTION - TRAVERSED

The apparent (see Defective Office Action section above) double patenting rejection of ones of Applicant's claims based upon US 6,342,731 B1 is respectfully traversed for several reasons. First and most important, US 6,342,731 B1 was filed by wholly differing/unrelated inventors from the inventors of the present application, and is owed by wholly differing Assignee (Micron Technology Inc.). Second, a wholly differing invention (vertically mountable device/receptacle) is involved. Accordingly, an obviousness double-patenting rejection is inapplicable/inappropriate. Applicant respectfully submits that the double patenting rejection with US 6,342,731 B1 is improper, and respectfully requests that such rejection be withdrawn.

**US 5,378,656 DOUBLE PATENTING
REJECTION - TRAVERSED/NOT SUPPORTED**

The US 5,378,656 non-statutory double patenting rejection is respectfully traversed because such rejection does not provide the factual analysis required for such rejections under U.S. patent law, i.e., the Examiner has not satisfied his/her initial burden to adequately support the rejection. More particularly, MPEP §804 providing guidance for examining states:

Since the analysis employed in an obviousness-type double patenting determination parallels the guidelines for a 35 USC 103(a) rejection, the factual inquiries set forth in *Graham v. John Deere Co.*, 383 US 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 USC 103 are employed when making an obviousness-type double patenting analysis. These factual inquiries are summarized as follows:

- (A) Determine the scope and content of a patent claim and the prior art relative to a claim in the application at issue;
- (B) Determine the differences between the scope and content of the patent claim and the prior art as determined in (A) and the claim in the application at issue;
- (C) Determine the level of ordinary skill in the pertinent art; and
- (D) Evaluate any objective indicia of non-obviousness.

Any obviousness-type double patenting rejection should make clear:

- (A) The differences between the invention defined by the conflicting claims - a claim in the patent compared to a claim in the application; and
- (B) The reasons why a person of ordinary skill in the art would conclude that the invention defined in the claim in issue is an obvious variation of the invention defined in a claim in the patent.

The rejection does not make clear the differences, or the reasons why a person of ordinary skill in the art would conclude that the invention defined in the claim in issue is an obvious variation of the invention defined in a claim in the patent. Applicant especially notes that there are substantial/significant differences between

the two sets of claims. As just one non-exhaustive example, independent Claim 15 of the present invention has the following features/limitations unique from the Claims of 5,378,656:

...in condition that said lead frame is placed on a heat stage having a groove for accommodating said chip mounting portion and said suspension leads and for a wire bonding operation, wherein said connecting step is performed in a condition that said chip mounting portion and said suspension leads are fitted in said groove, said rear surface of said semiconductor chip is in contact with an upper surface of said heat stage and said second surface of said chip mounting portion is spaced from a bottom surface of said groove;...

Accordingly, Applicant respectfully submits that the above analysis should be provided in order for the Examiner to satisfy his/her initial burden to support the rejection, or the rejection should be withdrawn.

35 USC §251, RECAPTURE REJECTION - TRAVERSED

The 35 USC §251 recapture rejection of Claims 63-72 is respectfully traversed. More particularly, MPEP §1412.01 allows a reissue Applicant to claim an invention which was disclosed within Applicant's original disclosure, even if it was not claimed in the original patent. In the present reissue, Applicant is now claiming the original FIG. 33 embodiment involving width variation along Applicant's suspension leads (see width of lead 3 verses a width of lead 4 in Applicant's FIG. 32), as validly allowed by MPEP §1412.01. In terms of claim language, independent claim 63, for example, recites: "wherein a width of each of said first and second suspension leads at the vicinity of said intersecting portion is wider than that of each said first and second suspension leads at vicinities beyond said semiconductor chip."

While the alleged recapture “[s]uspension leads unitarily...by adhesive” limitations may have been important to ones of Applicant’s prior ‘913 patent claims directed to a differing invention, such limitations are not particularly relevant to, and thus are not included in, Applicant’s present differing varying “width” invention/claims. Further, Applicant’s “lead width” limitations are narrowing limitations in the sense that “lead width” limitations were not included within Applicant’s prior ‘913 claims.

MPEP §1412.02 states (in relevant part) “If the narrowing limitation modifies the claim in such a manner that the scope of the claim no longer results in a recapture of the surrendered subject matter, then there is no recapture.” Such is the case here, *i.e.*, the present focus is on the varying “lead width” invention.

In addition to the foregoing, the following additional remarks from Applicant’s foreign representative are also submitted in support of traversal of the rejection and patentability of Applicant’s claims.

The prior ‘913 claims included the limitations A and B directed to the structure shown, for example, in Applicant’s FIG. 16, where limitations A represent a chip mounting portion 3 of small area with separating portions 20, and where limitations B represent separate adhesive portions 15 provided on both the chip mounting portions 3 and separating portions 20. Accordingly, it can be seen that the “adhesive” limitations were important to the prior ‘913 claims.

In contrast, Claims 63-72 are directed to the structure shown in FIG. 32, which includes a chip mounting portion 3 of a cross-shape having a smaller area than that of the chip, but having four wide portions wider than the suspension leads 4 beyond the chip.

Accordingly, the two groups of claims are directed to differing structures, so Applicant respectfully submits that the disputed limitations are not needed within Claims 63-72.

Accordingly, Applicant respectfully requests that the recapture rejection be withdrawn.

EXTENSIVE PROSECUTION NOTED

Applicant and the undersigned respectfully note the extensive prosecution which has been conducted to-date with the present application, and thus Applicant and the undersigned would gratefully appreciate any considerations or guidance from the Examiner to help move the present application quickly to allowance.

EXAMINER INVITED TO TELEPHONE

The Examiner is invited to telephone the undersigned at the local D.C. area telephone 703-312-6600, to discuss an Examiner's Amendment or other suggested action for accelerating prosecution and moving the present application to allowance.


CONCLUSION

In view of the foregoing amendments and remarks, Applicant respectfully submits that the claims listed above as presently being under consideration in this divisional reissue application are now in condition for allowance. Accordingly, early allowance of such claims is respectfully requested.

A Petition for an appropriate extension of the shortened statutory period for response set by the Office Action mailed 31 March 2003 is timely submitted herewith

(31 August 2003 being Sunday, 1 September 2003 being a federal holiday in the District of Columbia). To whatever other extent is actually necessary and appropriate, Applicant petitions for an extension of time under 37 CFR §1.136. A Form PTO-2038 is submitted herewith authorizing payment of the requisite Petition fee. Please charge any shortage in fees to ATS&K Deposit Account No. 01-2135 (as Order No. 501.32049R00).

Respectfully submitted,



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ATTACHMENTS:

Supplemental Declaration For Reissue Form PTO/SB/515
Petition for Extension of Time
Form PTO-2038 (Fee Code 1252)